

I.4 Goals and Objectives

- **Learn** about the ways and means of developmental research.
 - Types of studies, limitations, ethics
 - Publishing and making family policy.
- **Apply** the methods to test popular assertions and beliefs.
- **Evaluate** several influential studies/claims.

Measurement in Child Development Research

- *Observations*: watch 'em.
 - Naturalistic or Structured
- *Sample behavior*: test 'em.
- *Self reports*: ask 'em.

Naturalistic Observation

- **Natural** environment.
- “Cops” approach.
 - Baby biographies
 - First words.
- **Disadvantage**: Can't test private or infrequent behaviors.

Structured observation.

- Standardized Set-up
- Can study rare behavior!
- “Survivor” approach.
 - Gender-biased toys
- **Disadvantage**: Setting may affect behavior.

Sample Behavior with Tasks

- Some things are really hard to observe.
 - E.g. Memory, Intelligence, scholastic understanding.
- Find a task that taps the construct.
 - Digit span, Rubik's Cube, SAT's

Self Report

- Interviews and questionnaires:
 - How many of you have taken a poll?
 - Everyone else raise your hand cause you just did.
- **Disadvantage**: not always accurate.
 - Kids forget, lie, are just wrong.

Concerns with measurement

- **Reliability:** you will say/do the same thing another day.
- **Validity:** That this question (or test/experiment) measures what you wanted to measure.

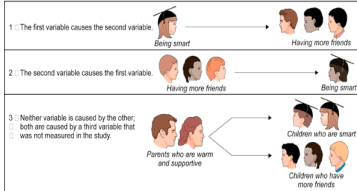
Representative Sampling.

- Your study is only as good as the people.
- **Population:** The big group we care about.
 - All children.
 - Children at 12 months
- **Sample:** Who we actually measure.
- Problem with much research is it focused exclusively on American children.

Correlational Studies

- A **correlation** describes a relation between two variables in the real world (usually a static picture, and rarely 100%).
 - Eg. Having friends is linked to being smart.
- Correlation Coefficient.
 - From -1 to 1.
 - 0 is no link at all
- Can never know the direction of correlation!
Correlation \neq causation.

Three Interpretations of a Correlation Coefficient

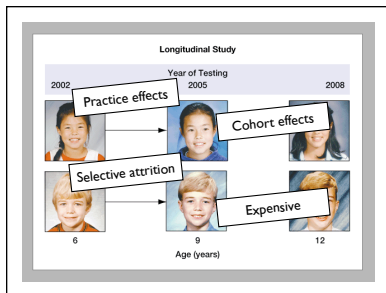


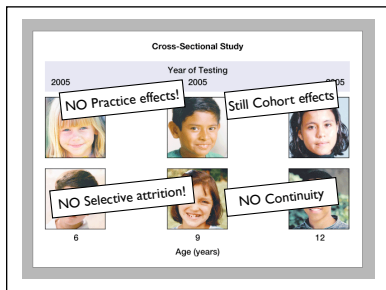
Experimental Studies

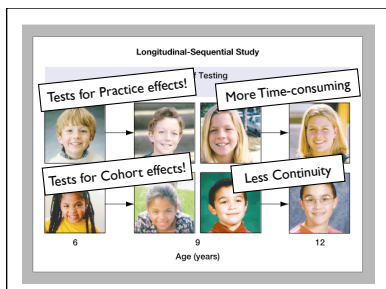
- **Hypothesis** which tests **causation**.
- **Variables** - literally "things that vary"
 - **Independent** (What you change).
 - **Dependent** (What you measure).
- Lab-based or **Field** Experiments.

More design features

- **Within-subjects:** When use same person.
 - Can test hypothesis on person.
 - More powerful.
- **Between-subjects:** When use different people.







Ethical Responsibilities

- Minimize risk.
- Informed consent.
- Avoid deception.
- Results private.

Communicating Research Results

- Step 1) write report & submit to journal.
- Step 2) revise until accepted.
- Published research provides the basis for the information presented in the book.
- Results of individual studies will be reported in the *Focus on Research* features

Focus on research: Answers key questions

- Who were the investigators and what was the aim?
- What were the IV and DV?
- Who were the subjects?
- What was the design?
- Were there ethical concerns?
- What were the results?
- What did they conclude?
- What converging evidence would help?
